# ART. XXXIII.—Additions to the List of New Zealand Worms. By Prof. F. W. HUTTON, of the Otago University.

[Read before the Otago Institute, 14th October, 1879.]

TURBELLARIA.

### Geoplana moseleyi, sp. nov.

SHAPE of the body, as in *G. traversii*. Mouth situated behind the middle; generative orifice half way between it and the posterior extremity. Eyes numerous round the anterior end, forming a line which expands into two patches on each side. Upper surface dark grey, speckled with white, bounded on the sides by a lateral stripe of brown; a broad dorsal stripe, orange, margined with brown, the brown separated from the orange by an interrupted narrow black line; lower surface brownish white.

Dunedin, in the bush, under dead trees.

The body is covered externally with very delicate cilia, which require a  $\frac{1}{5}$  objective to see.

### Genus Rhynchodemus, Leidy.

Body much elongated. Eyes two. Mouth cylindrical, elongate. External longitudinal muscles feebly developed. Ovaries simple, near the anterior extremity of the body. Lateral organs distinct.

R. testaceus, sp. nov.

Body elongate, depressed, tapering to an acute point at either end; broadest part behind the centre; upper surface convex, finely transversely striated; lower surface flat, without any ambulacral line. Eyes none. Mouth about two-thirds of the whole length from the anterior end; generative orifice half way between it and the posterior end. Upper surface cherry-red to brick-red; margin and ventral surface yellow. Length sometimes three inches.

Dunedin and Wellington, under stones, or in the ground.

I have not been able to detect either eyes or cilia on this species. I refer it provisionally only to *Rhynchodemus*, in the absence of full information about the genera of land Planarians.

#### NEMERTIDEA.

### Genus Borlasia, Oken.

Body long, sub-cylindrical or flattened, obtuse at the extremities; head simple, no eyes; proboscis terminal, with a longitudinal pit on each side; mouth inferior, longitudinal, not terminal; reproductive orifice in a tubercle on the side of the mouth.

B. novæ-zealandiæ, Quoy and Gaimard, Voy. Astrolabe, Zoology, IV., p. 290, pl. 24, f. 15–19.

Length about three inches, flat, pointed posteriorly, the head widened, heart-shaped, united to the body by a short neck, on which there are many striæ of an intense reddish brown. The mouth is a long slit, very delicate, without any lateral pits. Body reddish brown above, darker on the middle line; below yellow with indications of the intestinal canal, on each side of which there is a vascular system represented by two vessels with lateral ramifications. (Q. and G.)

Bay of Islands.

#### GEPHYREA.

#### Genus Phascolosoma, Müller.

Skin papillose ; proboscis with cylindrical tentacles.

P. annulata, sp. nov.

Body papillose, cylindrical, tapering posteriorly; pale brown, the tubercles darker. Proboscis nearly as long as the body, and tapering gradually into it; posteriorly papillose, and coloured like the body; anteriorly smooth, white, with some brown blotches; the anterior end encircled by about twelve narrow, brown, raised rings. Mouth with a ring of short blunt oral tentacles. Length, about 1 inch; breadth, '2 inches.

Dunedin, and Cape Campbell (Mr. Robson).

Sipunculus lutulentus, sp. nov.

Body cylindrical, narrowed posteriorly and ending in a pyriform swelling; cylindrical portion of the body smooth, faintly reticulated anteriorly, but only transversely striated posteriorly; the posterior pyriform portion rougher, especially the caudal apex. Proboscis short, roughened, thinner than the body. Colour, pale brown. Length, nearly six inches; of proboscis, threequarters of an inch. Breadth of anterior portion of body, '4 inch; of proboscis, '25 inch.

Cape Campbell (Mr. C. H. Robson).

ART. XXXIV.—Descriptions of new Star-fishes from New Zealand. By Prof. A. E. VERRILL. From the Trans. Connecticut Acad., 1867. Communicated by Prof. HUTTON.

#### [Read before the Otago Institute, 14th October, 1879.]

THE following interesting species of New Zealand Star-fishes were sent from Peru by Mr. F. H. Bradley, to whom they were given for our Museum by Henry Edwards, Esq. They afford a partial illustration of the little-known *Echinoderm* fauna of the Southern Ocean. They contrast strongly with those of the Northern Hemisphere.

## Calasterias, Verrill.

Large star-fishes with 4 rows of ambulacral suckers, and large swollen rays (eleven in the tpyical species) which are free to near the base, and are